

Listing of the Claims

1. (Previously Presented) A method of producing biogas by anaerobic digestion of organic matter, comprising:

grinding organic matter,

mixing the organic matter with a liquid to form a slurry with a dry solids content of 15-45% by weight TS,

feeding the slurry to a tank reactor and, in the tank reactor, contacting the slurry with biogas-producing bacteria for digestion under anaerobic conditions, and

digesting the slurry in the tank reactor at a dry solids content of 5-10% by weight TS while producing biogas.

2. (Original) A method as claimed in claim 1, in which the ground organic matter is mixed with a liquid to form a slurry with a dry solids content of 20-40% by weight TS.

3. (Previously Presented) A method as claimed in claim 1, in which at least half of the total dry solids of the slurry originates from grain and/or dried grain offal and/or mixtures thereof.

4. (Original) A method as claimed in claim 3, in which the grain is essentially present in the form of whole and screened grains.

5. (Previously Presented) A method as claimed in claim 1, in which organic matter of a type other than the first-mentioned organic matter is also digested in the reactor, at least 10% by weight of the total dry solids introduced into the reactor originating from grain and/or dried grain offal included in the first-mentioned organic matter.

6. (Previously Presented) A method as claimed in claim 1, in which the liquid with which the organic matter is mixed is essentially pure water.

7. (Previously Presented) A method as claimed in claim 1, in which the liquid with which the organic matter is mixed at least partly is digested sludge which is removed from the reactor.

8. (Previously Presented) A method as claimed in claim 1, in which the organic matter is dried to a dry solids content of at least 70% by weight TS before being ground.

9. (Currently Amended) A device for producing biogas by anaerobic digestion of organic matter, comprising:

a premixing tank for mixing ground organic matter with a liquid to a slurry with a dry solids content of 15-45% by weight TS; and

a feed pipe for feeding the slurry to a sealable, essentially gas-tight tank reactor in which the slurry is contacted with biogas-producing bacteria for digesting the slurry at a dry solids content in the tank reactor of 5-10% by weight TS, said tank reactor having an agitator for

agitating the matter in the tank reactor, an inlet for slurry from the premixing tank and outlets for produced biogas and formed digested sludge.

10. (Previously Presented) A device as claimed in claim 9, in which a mill is arranged for grinding the organic matter before being introduced into the premixing tank.

11. (Previously Presented) A device as claimed in claim 9, in which a supply pipe is arranged for feeding digested sludge from the reactor to the premixing tank.

12. (Previously Presented) A method as claimed in claim 2, in which at least half of the total dry solids of the slurry originates from grain and/or dried grain offal and/or mixtures thereof.

13. (Previously Presented) A device as claimed in claim 10, in which a supply pipe is arranged for feeding digested sludge from the reactor to the premixing tank.